

Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) An article of expanded PTFE exhibiting a fibril and node structure comprising two distinct pore size distributions, one within another, wherein a first pore size distribution ~~comprises~~ contains pores within a first predetermined size range, a second pore size distribution contains pores within a second predetermined size range that defines larger pores than the pores defined by the first predetermined size range, smaller pore sizes than a second pore size distribution and the pores of the smaller first pore size distribution are randomly distributed within the pores of the larger second pore size distribution, ~~for an application as vascular graft, cardio-vascular patch, cardio-vascular suture, or stent cover wherein the~~ expanded PTFE is created at a temperature above a melt-point of the PTFE.

2. (Currently amended) An article as described in claim 1, wherein the ~~smaller pore sizes are in the~~ first range of is from about 2 to 15 microns and the second pores of the larger pore size distribution are in the range of is from about 20 to 50 microns.

3. (Currently amended) An article as described in claim 2, wherein the ~~smaller pore sizes are in the~~ first range of is from about 3 to 8 microns and the second pores of the larger pore size distribution are in the range is from about 25 to 40 microns.

4. (Currently amended) An article as described in claim 3, wherein the ~~smaller sizes are in the~~ first range is from about 4 to 6 microns and the second pores for the larger pore size distribution are in the range is from about 25 to 35 microns.

5. (previously presented) An article as described in claim 4, wherein the smaller pore sizes are around 5 microns and the pores for the larger pore size distribution are around 30 microns.

6. (previously presented) An article described in claim 1, that is configured into a tube.

7. (original) An article as described in claim 6, that is configured into a reinforced tube.

8. (original) An article as described in claim 1, that is configured into a sheet.

9. (original) An article described in claim 8, that is configured into a reinforced sheet.

10. (previously presented) A method for producing a vascular graft, cardio vascular patch, cardio vascular suture, or stent cover from expanded PTFE, said method comprising the steps of:

selecting a first PTFE resin that expands to exhibit a distribution of relatively small pores having a pore size within a first predetermined pore size range,

selecting a second PTFE resin that expands to exhibit a distribution of relatively large pores having a pore size within a second predetermined pore size range that defines larger pores than the pores defined by the first predetermined pore size range,

mixing at least the first and second resins ~~and, if any, further resins,~~ homogeneously and blending them with a lubricant, such that, after expanding, the pores of the ~~smaller~~ first pore sized distribution are randomly distributed within the pores of the larger second pore size distribution,

forming the such obtained blend into a billet,

extruding the billet into a tube or sheet, and

expanding the extruded PTFE tube or sheet ~~and heating it~~ at a temperature above a melt point of the extruded PTFE.

11. (Currently amended) The method according to claim 10, wherein the small pore size ~~is in the range~~ is from 2 to 15 microns and the large pore size ~~is in the range~~ is from 20 to 50 microns.

12. (Currently amended) The method according to claim 11, wherein the small pore size ~~is in the range~~ is from 3 to 8 microns and the large pore size ~~is in the range~~ is from 25 to 40 microns.

13. (Currently amended) The method according to claim 12, wherein the small pore size ~~is in the range~~ is from 4 to 6 microns and the large pore size ~~is in the range~~ is from 25 to 35 microns.

14. (previously presented) The method according to claim 13, wherein the small pore size is around 5 microns and the large pore size is around 30 microns.

15. (Currently amended) The method according to claim 10, wherein, during the mixing, the pores of the larger pore size distribution are formed between larger nodes and longer fibrils interconnecting the larger nodes and wherein the pores of the smaller pore size distribution are formed between the larger nodes, smaller nodes and shorter fibrils interconnecting the smaller nodes with each other and/or with the larger nodes

16. (Currently amended) An article as claimed in claim 1, wherein the pores of the larger pore size distribution are ~~formed~~ disposed between larger nodes and longer fibrils interconnecting the larger nodes and wherein the pores of the smaller pore size distribution are ~~formed~~ disposed between the larger nodes, smaller nodes and shorter fibrils interconnecting the smaller nodes with each other and/or the larger nodes.

17. (Currently amended) An article of porous expanded PTFE, comprising:
a first series of major nodes interconnected by first fibrils having a first length, wherein the major nodes and first fibrils are positioned to form pores having a size between approximately 20 and 50 microns; and
a second series of minor nodes interconnected to said first series of major nodes by second fibrils having a second length, wherein the minor nodes and second fibrils are positioned to form pores having a size between approximately 2 and 15 microns, and wherein each minor node is connected to adjacent major nodes by the second fibrils;
wherein said second length is shorter than said first length; and
wherein the PTFE article is formed by expansion at a temperature near a melt point of the PTFE.

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18. (Previously presented) The article of claim 17 wherein a minor node in combination with a length of two second fibrils has a length substantially equal to said first length.